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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/075,657	02/12/2002	Wei-Zhong Li	13854-006001	9368

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EXAMINER
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FINEMAN, LEE A

ART UNIT	PAPER NUMBER
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2872

DATE MAILED: 02/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/075,657	Applicant(s) LI, WEI-ZHONG	
	Examiner Lee Fineman	Art Unit 2872	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2005.
- 2a) ☒ This action is FINAL.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-21 is/are allowed.
- 6) ☒ Claim(s) 22-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 2/12/02 & 12/5/05 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

This Office Action is in response to an amendment filed 5 December 2005 in which claims 22 and 25 were amended. Claims 1-27 are pending.

#### *Drawings*

1. A replacement drawing for fig. 3b was received on 5 December 2005. This drawing is acceptable.

#### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 22-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Sui, US 6,594,068 B2.

Regarding claims 25-27, Sui discloses in figs. 10A and 10B (also see figs. 8A and 8B for detail of the structured half wave plate, and column 5, lines 53-59 and column 7, lines 3-5 stating the equivalent systems except for the Wollaston prisms being replaced by birefringent crystals) an optical component group comprising: a first birefringent material (537); a structured half wavelength plate (538 which is comparable to 317t, 317t', 317b, 317b' of fig. 8A) coupled between the first birefringent material (537) and a second birefringent material (539), the

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structured half wavelength plate being operable to rotate a polarization of light passing through a first portion (part of 538 which is comparable to 317t', 317b) of the structured half wavelength plate while the polarization of light passing through a second portion (part of 538 which is comparable to 317t, 317b') of the structured half wavelength plate remains substantially unchanged (see figs. 10C and 8C and column 5, lines 17-21); and a Faraday rotator (540) coupled between the second birefringent material (539) and a wavelength plate (541); where the second birefringent material (539) is coupled between the structured half wavelength plate (538) and the Faraday rotator (540); and wherein the structured half wavelength plate (538) is coupled to the first birefringent material plate (537) through a wedge (536); and wherein the structured half wavelength plate (538 which is comparable to 317t, 317t', 317b, 317b' of fig. 8A) includes two regions of half wavelength plates (317t', 317b) placed diagonal to each other (figs. 10C and 8C) and two regions of transparent plates (317t, 317b') placed diagonal to each other (figs. 10C and 8C).

Regarding claims 22-24, when the direction of the light is reversed (i.e., from right to left) the first birefringent material is element 544, the structured half wavelength plate is element 543 which is comparable to 324t, 324t', 324b, 324b' of Fig. 8A, wedge is element 545, and the wavelength plate (541) is coupled between the second birefringent material (542) and a Faraday rotator (540), and where the second birefringent material (542) is coupled between the structured half wavelength plate (543) and a wavelength plate (541).

***Allowable Subject Matter***

3. Claims 1-21 are allowed.

4. The following is an examiner's statement of reasons for allowance:

Claims 1-21 are allowable over the prior art for at least the reasons set forth in the office action mailed 1 November 2005.

### *Response to Arguments*

5. Applicant's arguments with respect to claims 22-27 have been considered but are moot in view of the new ground(s) of rejection.

6. It is noted by the Examiner that the drawing and specification made in the previous Office Action have been withdrawn due to amendment by the Applicant.

### *Conclusion*

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lee Fineman whose telephone number is (571) 272-2313. The examiner can normally be reached on Monday - Friday 7:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



LAF  
February 22, 2006

  
MARK A. ROBINSON  
PRIMARY EXAMINER